

REMARKS

In the Office Action the Examiner has rejected Claims 1 to 3 and 5 as being obvious under 35 U.S.C. 103(a) over U.S. Patent No. 2,807,155, to Williamitis, in view of U.S. Patent No. Re. 19,265, to Midgley, Jr., et al, and JP 62-292895, to Kohashi, et al. The Examiner maintains that Williamitis teaches a fluid composition for a refrigerator containing a refrigerant such as disclosed by Midgley, Jr., et al and as the refrigerator oil, a pentaerythritol tetraester. The Examiner maintains that Midgley, Jr., et al is relied on for showing that the refrigerant can be a chlorine-free fluorocarbon. Furthermore, the Examiner maintains that Kohashi, et al teaches the addition of 0.05 to 10 wt % of a glycidyl ester to refrigerator oil, which can include pentaerythritol ester, so as to suppress the corrosion of metal components and stabilize the oil.

It is the applicants' position that it is not proper to combine the Kohashi, et al reference with Williamitis and Midgley, Jr., et al as proposed by the Examiner. As specifically pointed out in Kohashi, et al, the object of the invention is to provide an additive in a refrigerating machine oil which stabilizes flons and suppresses corrosion of the metallic refrigeration parts. Furthermore, as pointed out in the first paragraph under Technology of the Prior Art, flon decomposition results in the production of hydrogen chloride which is the substance that corrodes the metallic

parts. The second paragraph thereunder also equates flon decomposition to the production of the corrosive hydrogen chloride. Kohashi, et al proposes that 0.05 - 10 wt % of a glycidyl ester may be used as such an additive.

According to the claims of the present invention, 0.1 - 5 % by weight of an epoxy compound, which may include glycidyl ester epoxy compounds, is added to the refrigeration oil for thermal and chemical stability. However, the purpose of the addition of the glycidyl ester in Kohashi, et al is to scavenge the corrosive hydrogen chloride produced by the degrading flon or fluoro-chloro hydrocarbon refrigerant. Inasmuch as, according to the present invention, the refrigerant used is a chlorine-free fluorocarbon refrigerant and thus no hydrogen chloride is or can be produced upon decomposition, the purpose for using the glycidyl ester additive as enunciated in Kohashi, et al does not exist in this case. Thus, there is no suggestion or reason indicated in the cited references for combining Kohashi, et al with Williamitis and Midgley, Jr. et al and, therefore, the obviousness rejection of the claims based thereon must fail. Panduit Corp. v. Dennison Mfg. Co., 1 U.S.P.Q.2d 1593 (CAFC 1987).

In other words, the Kohashi, et al reference itself teaches away from the present invention since the Kohashi, et al additive is used specifically in a chlorine containing refrigeration composition whereas the present invention is limited to a

chlorine-free refrigerant. It is, therefore, respectfully submitted that the rejection of Claims 1 to 3 and 5 as being obvious over the combination of Williamitis, Midgley, Jr., et al and Kohashi, et al is erroneous and should be withdrawn.

In the Office Action the Examiner also rejected Claims 4 and 6 to 8 as being obvious under 35 U.S.C. 103(a) over Williamitis, in view of Midgley, Jr., et al and Kohashi, et al as applied to the rejection of Claims 1 to 3, and 5 and further in view of JP 55-155093. The Examiner maintains that JP 55-155093 teaches the addition of trimethyl phosphate to pentaerythritol ester refrigerator oil to prevent corrosion. As pointed out above, there is no reason for combining the teaching of Kohashi, et al with the other cited references since the refrigerant in Claims 4 and 6 to 8 is chlorine-free and as disclosed in Kohashi, et al, the glycidyl ester additive therein disclosed is suitable for use with chlorine-containing refrigerants. It is, therefore, respectfully submitted that the rejection of Claims 4 and 6 to 8 as being obvious over the combination of Williamitis, Midgley, Jr. et al, Kohashi et al, and JP 55-155093 is erroneous and should be withdrawn.

Furthermore, the applicants respectfully disagree with the Examiner's position that the Williamitis reference teaches a fluid composition for a refrigerator containing a refrigerant such as disclosed by Midgley et al. Although it is true the Williamitis

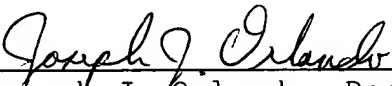
reference at Column 2, lines 23-26 states that the refrigerant used therein "preferably comprises a fluoro halo derivative of an aliphatic hydrocarbon of the character disclosed" in Midgley, Jr., et al (Re. 19,265), the applicants wish to point out to the Examiner that the refrigerants actually specified for use by Williamitis are Freon 11, Freon 12 and Freon 22 (Patent, Column 2, lines 27-29), which are chlorine-type fluorocarbon refrigerants. Nowhere in the Williamitis reference is there a suggestion that refrigerants other than Freon 11, Freon 12 or Freon 22 refrigerants are actually used together with the pentaerythritol tetraester oil. Therefore, it is respectfully submitted that Williamitis does not, in fact, teach a refrigerator composition containing a chlorine-free fluorocarbon refrigerant.

Submitted herewith is a Terminal Disclaimer disclaiming the terminal part of any patent granted on the above-identified application which extends beyond the term of U.S. Patent No. 6,410,492. This Terminal Disclaimer is being filed for the purpose of expediting prosecution of the instant application and not as a result of acquiescence in the Examiner's holding that the claims of the instant application are unpatentable over the claims of U.S. Patent No. 6,410,492 by reason of obviousness type double patenting.

In view of the above, it is respectfully submitted that Claims 1 to 8 are patentable and should be allowed so that the case may be passed to issue. Such action is respectfully solicited.

Respectfully submitted,

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